CLAIMS

What is claimed is:

1. A photography system, comprising:

a) a remote control; and

b) a digital camera having a field of view, which digital camera can detect in its field of view the position of the remote control, and which digital camera selects a region from its field of view to photograph based on the detected position of the remote control.

2. The photography system of claim 1 wherein the digital camera centers the selected region on the detected position of the remote control.

3. The photography system of claim 1 wherein the selected region is of a predetermined size, and wherein the digital camera positions the selected region as nearly as possible to centered on the detected position of the remote control while keeping the selected region within the camera's field of view.

4. The photography system of claim 1 wherein digital camera:

a) selects the largest region that will fit within its field of view when the selected region is centered on the detected position of the remote control, and

b) centers the selected region on the detected position of the remote control.

5. The photography system of claim 1 wherein minimum and maximum sizes of the selected region are predetermined, and wherein the digital camera

a) selects a region that is the smaller of the predetermined maximum region size and the largest size that will fit within the camera's field of view and can be centered on the detected position of the remote control when such a region can

be selected that is larger than the predetermined minimum region size, and otherwise

b) selects a region that is of the predetermined minimum region size and positions the region as nearly as possible to centered on the detected position of the remote control while keeping the region within the camera's field of view.

6. The photography system of claim 1 wherein the remote control further comprises a light source, and the digital camera detects the position of the remote control by detecting the light source.

7. The photography system of claim 6 wherein the light source emits light intermittently.

8. The photography system of claim 7 wherein the digital camera detects the position of the remote control by detecting a change in state of the light source between successive digital images.

9. The photography system of claim 6 wherein the light source emits no light during the taking of a final photograph.

10. The photography system of claim 6 wherein the light source is used to signal the digital camera to perform at least one other function in addition to selecting a region to photograph.

11. The photography system of claim 10 wherein the light source is used to signal the digital camera to take a final photograph.

12. The photography system of claim 1 wherein the digital camera preferentially focuses on subjects in the vicinity of the remote control.

13. The photography system of claim 1 wherein the digital camera is capable of making video recordings.

14. The photography system of claim 13 wherein the digital camera re-selects the region to photograph as the remote control moves during recording.

15. The photography system of claim 13 wherein the remote control further comprises a light source that emits light intermittently, and wherein the digital camera removes the effect of the light source from video frames in which the emitting light source appears.

16. The photography system of claim 15 wherein the effect of the light source is removed using pixel information from other video frames in which the emitting light source does not appear.

17. The photography system of claim 13 wherein the selected region is of a predetermined size, and wherein the digital camera positions the selected region as nearly as possible to centered on the position of the remote control, while keeping the region within the camera's field of view.

18. The photography system of claim 1 wherein the digital camera comprises an optical zoom function, and wherein the digital camera improves a resolution of the selected region using the optical zoom function

19. A method of photography, comprising the steps of:

a) detecting, in a field of view of a digital camera, a position of a remote control; and

b) automatically selecting, based on the position of the remote control, a region from the camera's field of view to photograph.

20. The method of claim 19 wherein selecting a region from the camera's field of view comprises centering the region on the detected position of the remote control.

21. The method of claim 19 wherein the region is of a predetermined size, and selecting a region from the camera's field of view comprises positioning the selected region as nearly as possible to centered on the detected position of the remote control, while keeping the selected region within the camera's field of view.

22. The method of claim 19 wherein selecting a region from the camera's field of view comprises:

a) selecting the largest region that can be centered on the detected position of the remote control while fitting within the camera's field of view; and

b) centering the region on the detected position of the remote control.

23. The method of claim 19 wherein maximum and minimum sizes of the selected region are predetermined, and wherein selecting a region from the camera's field of view comprises:

a) selecting a region to photograph that is the smaller of the predetermined maximum size region and the largest region that can be centered, while remaining within the camera's field of view, on the detected location of the

remote control when such a region can be selected that is larger than the predetermined minimum region size, and centering the selected region on the detected location of the remote control; and otherwise

b) selecting a region to photograph that is of the predetermined minimum region size and is positioned as nearly as possible to centered on the detected location of the remote control and is entirely within the camera's field of view.

24. The method of claim 19 wherein detecting the position of the remote control further comprises:

a) emitting light from the remote control; and

b) detecting the emitted light.

25. The method of claim 24, further comprising:

a) signaling, using the light emitted from the remote control, the digital camera to perform a function in addition to selecting a region to photograph; and

b) performing the function in the digital camera.

26. The method of claim 25 wherein the function is the taking of a final photograph.

27. The method of claim 19 wherein detecting the position of the remote control further comprises:

a) emitting light intermittently from the remote control; and

b) detecting changes in the state of the emitted light by comparing successive digital images taken by the digital camera.

28. The method of claim 19, further comprising:

a) emitting light intermittently from the remote control;

b) making a video recording; and

c) removing the effect of the light from a video frame in which the light appears.

29. The method of claim 28 wherein removing the effect of the light from a video frame in which the light appears further comprises copying pixel information from another video frame.

30. The method of claim 28 wherein the light changes states with a frequency of approximately half the frequency with which the digital camera captures video frames during video recording.

31. The method of claim 19, further comprising making a video recording of the selected region.

32. The method of claim 31, further comprising repositioning the selected region when the remote control moves within the field of view of the digital camera.

33. The method of claim 19, further comprising preferentially focusing on subjects in the vicinity of the remote control.

34. The method of claim 19, further comprising improving a resolution of the selected region using an optical zoom capability of the digital camera

35. A photography system, comprising:

a) means for detecting, in a field of view of a digital camera, the position of a remote control; and

b) means for digitally framing a photograph based on the detected position of the remote control.